

Remarks

In the present Office Action, claims 1 through 8, 10, 15 through 22, 25 through 27, 32 and 33 were rejected, while claims 9, 12 through 14, 23, 24, 28 through 31 and 34 were objected to as being dependent upon a rejected base claims, but were indicated to be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. By this response, claims 1 through 3, 8, 28, 32 and 33 have been amended, while claims 4 through 7, 9 and 34 have been cancelled, and new claims 35 through 38 have been added.

Rejection under 35 USC 112, ¶2

The Examiner specifically rejected claim 9 as being indefinite for failure to make clear the phrase "a ratio of weight differences between said plurality of weight sensors". The limitations from original claim 9 have been incorporated into claim 8, while both the original and amended corresponding specification section should remove any indefiniteness of these limitations. As all of the recited "sensed ratio", "weight differences" and "imbalance measure" were limitations discussed in the original specification and claims, the Applicant submits that the present amendments do not introduce any new matter.

Rejection under 35 USC 102

Original independent claims 1, 32 and 33 were rejected under 35 USC 102(b) as being anticipated by US Patent 6,657,547 to Ching-Yao (hereinafter the '547 patent). These claims have been amended to more precisely recite the nature of the ladder. In particular, the claims now require that the ladder be equipped with numerous weight sensors that measure weight loads imparted to the ladder's legs or rungs, and that the controller measure differences in these sensed weights to determine a measure of imbalance. When the difference in measured signals reaches a predetermined threshold, the controller sends an appropriate signal to an audio alarm, visual alarm or both.

By contrast, the device of the '547 patent measures excess weights to determine if an overload condition exists that could lead to a physical collapse of the ladder. For example, the '547 patent states, at column 3, lines 14 through 18, that the weight sensors of that device "sum up individual loading on each ladder foot" and that as soon as the summed up total value exceeds a ladder load limit, an alarm signal is sent. There is no indication that the device of the '547 patent employs signal differencing or related comparing of signals to arrive at a measure of ladder imbalance.

The '547 patent briefly discusses, but does not claim, an "offset loading" condition (as shown in FIG. 7 and described at column 3, lines 19 through 25); however, what it discloses does not contain sufficient technical information to enable a person of ordinary skill in the art to which the claimed invention pertains to allow such person to make and use the claimed subject matter, without first having to perform extensive experimentation or make an unobvious contribution. As such, the teaching of the '547 patent is fatally defective as a reference, as the purported imbalance situation shown in the ladder FIG. 7 will never lead its weight sensor summing approach to alert the user as to that condition. First, the '547 patent does not disclose how the summing algorithm that is configured to detect overload conditions would provide adequate indication of the claimed tipping condition. Even if such a system were adequate for such purpose, the situation in FIG. 7 is an impossibility, as to achieve the imbalance shown by leg "B" being off the ground would require that the center-of-gravity of the system (the ladder plus the person standing on it) crosses over to a region outside the support footprint determined by legs A and B of the ladder. As such, the summing weight sensing system of the '547 patent cannot provide a warning to a user of the claimed device. Stated another way, there is nothing to suggest that the device depicted in the '547 patent can reconcile a physically impossible ladder operating condition with a weight summing, sensing and warning system to teach the claimed device.

MPEP 2121.01 cites *Elan Pharm., Inc. v. Mayo Foundation for Medical and Education Research*, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003) for the proposition that an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter. It

further went on to state that the mere naming or description of the subject matter is insufficient as an anticipatory reference if the subject matter cannot be produced without undue experimentation. It further cited *In re Donohue*, 226 USPQ 619 (Fed. Cir. 1985) for the position that for the reference to be anticipatory by placing the public in possession of the claimed invention before the date of invention, one of ordinary skill in the art must be able to combine the reference's description of the invention with his [or her] own knowledge to make the claimed invention." Since there is no indication that one of ordinary skill in the art would apply such knowledge to produce a ladder alerting system to warn a user of a pending physically impossible ladder configuration, the present rejection runs afoul of the requirement of MPEP 2121 for establishing a *prima facie* case for claim rejection. As such, the present rejection should be withdrawn.

Rejection under 35 USC 103

"To establish a *prima facie* case of obviousness, three basic criteria must be met." MPEP 2143. One of the requirements is that all of the claim limitations must be taught or suggested. MPEP 2143.03. As discussed above, the '547 patent does not disclose a tip warning system that employs a plurality of weight sensors and a controller to send warnings to an alarm based on a weight imbalance measure that is determined by comparison between signals received from the various sensors. Furthermore, since none of U.S. Patents 5,853,065 to Hutson et al, 5,594,154 to Ziolkowski or 4,554,994 to Weiner correct this deficiency, the present rejection is defective, and on this requirement the Applicant requests that the present rejection be withdrawn.

Conclusion

For the foregoing reasons, the Applicant respectfully submits that all of the claims are patentable over the cited art, and are entitled to a finding of allowability by the Examiner. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,
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